DOCUMENT RESUME

ED 112 389 CS 002 173

TITLE	Functional Literacy--Basic Reading Performance; An Assessment of In-School 17-Year-Olds in 1974. Press Summary.
INSTITUTION	Education Commission of the States, Denver, Colo. National Assessment of Educational Progress.
SPONS AGENCY	Office of Education (DHEW), Washington, D.C. Right to Read Program.
PUB DATE	75
NOTE	20p.
EDRS PRICE	MF-$0.76 HC-$1.58 Plus Postage
DESCRIPTORS	Comparative Analysis; *Functional Illiteracy; *Literacy; *Reading Achievement; Reading Research; *Reading Skills; Secondary Education; *Socioeconomic Influences
IDENTIFIERS	*National Assessment of Educational Progress; Right to Read

ABSTRACT

In 1974, the National Right to Read Effort asked that the National Assessment of Educational Progress (NAEP) conduct a Mini-Assessment of Functional Literacy (MAFL) in conjunction with its regular assessment of ten learning areas usually taught in school. The first MAFL was administered to 5,200 17-year-olds statistically selected to represent the entire population of in-school 17-year-olds in America. These students were asked to answer questions and complete basic everyday reading tasks which had been selected by a panel of reading specialists appointed by Right to Read. All groups gained in functional reading skills measured by the 64 exercises which were used both in the regular NAEP reading assessment in 1971 and in the MAFL in 1974. (Summary figures are included which list percentages of response for categorical groups tested--superior reader, region, national, sex, race, parental education, and community). (LL)

****
* Documents acquired by ERIC include many informal unpublished *
* materials not available from other sources. ERIC makes every effort *
* to obtain the best copy available. Nevertheless, items of marginal *
* reproducibility are often encountered and this affects the quality *
* of the microfiche and hardcopy reproductions ERIC makes available *
* via the ERIC Document Reproduction Service (EDRS). EDRS is not *
* responsible for the quality of the original document. Reproductions *
* supplied by EDRS are the best that can be made from the original. *
****

ED112389

FUNCTIONAL LITERACY

Basic Reading Performance

An Assessment of In-School 17-Year-Olds in 1974

U.S. DEPARTMENT OF HEALTH, EDUCATION & WELFARE
NATIONAL INSTITUTE OF EDUCATION
THIS DOCUMENT HAS BEEN REPRODUCED EXACTLY AS RECEIVED FROM THE PERSON OR ORGANIZATION ORIGINATING IT. POINTS OF VIEW OR OPINIONS STATED DO NOT NECESSARILY REPRESENT OFFICIAL NATIONAL INSTITUTE OF EDUCATION POSITION OR POLICY

Prepared for
The National Right to Read Effort
400 Maryland Ave., SW
Washington, D.C. 20202

CS 002 176

In cooperation with
The National Assessment of Educational Progress
(A project of the Education Commission of the States)
1860 Lincoln Street, Suite 700
Denver, Colorado 80203

PRESS SUMMARY

NATIONAL ASSESSMENT OF EDUCATIONAL PROGRESS

1975

This publication was prepared and produced pursuant to agreements with the National Right to Read Effort and the National Center for Education Statistics, Office of the Assistant Secretary for Education, Department of Health, Education, and Welfare. The statements and views expressed herein do not necessarily reflect the position and policy of the Office of the Assistant Secretary for Education but are solely the responsibility of the National Assessment of Educational Progress, a project of the Education Commission of the States.

TABLE OF CONTENTS

		Page
I.	Reading and Society	1
II.	The Assessment.	2
III.	Setting the Standard.	7
IV.	The Results.	9
V.	Summary Figures.	13

1. READING AND SOCIETY

Reading, most Americans would probably say, is the one essential skill that all children must learn and learn well.

Although some argue we are becoming more visually oriented, our society hasn't yet turned its attention away from reading. We have long expected that, whatever else they do, schools will teach reading.

When achievement scores drop, parents still raise an outcry and school districts add on intensive remedial and experimental reading programs.

Within the past 5 to 10 years, millions of federal dollars have been spent on special reading projects directed at the disadvantaged, at adults whose schooling was limited and at other special groups.

Yet, nationally, there has been little hard evidence to indicate exactly how well Americans read, what kinds of reading they do best and whether their reading levels enable them to get along adequately in their world.

Now an attempt has been made to determine how well 17-year-olds in school can perform basic functional reading tasks. These results raise some questions, but they should not be seen as the complete picture. No study yet designed, however sophisticated, can claim to have measured every inch of the uneven terrain of reading.

Neither should the names used here to identify certain groups be seen as explanations of why groups scored as they did. They are simply convenient descriptive labels and not an identification of factors which might influence learning.

Again, these results are only guides. It is up to society to look to many such guides before choosing a path for its children.

II. THE ASSESSMENT

This special study of reading was commissioned by the National Right to Read Effort and conducted by the National Assessment of Educational Progress (NAEP), a project of the Education Commission of the States.

Since 1969, NAEP has been studying what Americans in four age groups know and can do in 10 learning areas usually taught in school. The National Right to Read Effort asked that NAEP conduct a Mini-Assessment of Functional Literacy (MAFL), in conjunction with its regular assessment.

The first MAFL was administered in 1974 to 5,200 17-year-olds then enrolled in school. They were statistically selected to represent the entire population of in-school 17-year-olds in America. The young people were asked to answer questions and complete tasks in reading which had been selected by a panel of reading specialists appointed by the Right to Read. These exercises were judged to be examples of basic everyday reading tasks. According to the specialists, all 17-year-olds should be able to complete the MAFL exercises if they are to function adequately in everyday life.

The exercises included such questions as:

+ Here are pictures of four doors you might find in a school. Fill in the oval under the door where you might go for lunch. (The doors were labeled Principal, Nurse, Cafeteria and Library.)
+ How many additional books must you buy? (One of several questions about a reprinted book club announcement.)
+ Must a person appear at the Traffic Violation Bureau to plead "not guilty" to a traffic offense? (One of several questions about a replica of a traffic ticket.)

+ Here is an ad from a national magazine.

A FOREST'S FUTURE IS IN YOUR HANDS

Every tree, every shrub, and all our wildlife depend on you to help prevent forest fires. So please follow Smokey's ABC's. Always hold matches till cold. Be sure to drown all campfires, stir the ashes, and drown them again. Crush all smokes dead out.

Please! Only you can prevent forest fires

The purpose of this advertisement is to get you to

- enjoy camping.
- enjoy the wildlife.
- protect the forests.
- plant trees properly.
- I don't know.

There were 86 such exercises, designed to find out how well people do in certain reading skills. Sixty-four of these exercises were duplicates from the 1971 reading assessment. It is on these 64 exercises that comparisons between the 1971 and 1974 assessments are made.

The reading skills assessed were:

+ Understand word meanings. After the person produces the sound that makes up the word, can he/she understand it?
+ Glean significant facts. Can the person identify specific facts contained in different kinds of reading material?
+ Comprehend main ideas and organization. Can the reader identify the main idea or topic and understand how the writer organized facts to support it?
+ Draw inferences. Can the reader go beyond the information given by the writer and draw conclusions based on that information?
+ Read critically. Can the reader use his own thoughts and experiences to analyze, criticize, evaluate and then accept, modify or reject what the writer has said?

Labels attached to categories of reading tasks can be misleading by implying greater difficulty than the actual tasks display. The functional literacy reading tasks required only a basic reading skill in all categories. For example, while comprehending main ideas and organization generally implies a higher-order reading skill, the exercises included in this category required a very basic skill. Four of the eight exercises merely required knowledge of the alphabetical organization of dictionaries, telephone books and encyclopedias. Two asked for the main idea of a very short passage (two to four lines). One asked which of four sentences did not belong with others, and one asked with which fact a passage begins.

The types of reading materials presented to 17-year-olds in the mini-assessment were:

+ Passages, such as those found in stories, poems or newspaper and magazine articles.
+ Graphic materials: drawings, pictures, signs and coupons.
+ Graphic materials: charts, maps, graphs.
+ Graphic materials: forms, such as a report card and a long-distance telephone bill.
+ Reference materials: such as dictionaries, encyclopedias, the telephone directory.

The National Assessment of Educational Progress reports all its results, including those for the Mini-Assessment of Functional Literacy, for the following categories:

+ Geographic regions: Southeast, West, Central and Northeast.
+ Males and females.
+ Black and white racial groups.
+ Parental education consisting of the subcategories: no high school for either parent; some high school for at least one parent, but neither with more formal education; at least one parent who graduated from high school; at least one parent with some formal education beyond high school.
+ Size and type of community, consisting of the sub-categories:

  Low Metro--schools within large urban areas where high percentages of students have parents not regularly employed or on welfare. Students from such schools make up about 10 percent of the respondents.

  High Metro--schools within large urban areas where high percentages of students have parents in professional and managerial occupations. Students from such schools make

up about 10 percent of the respondents.

Extreme Rural--schools within rural areas and small towns where high percentages of students have parents who are farm workers. Students from such schools make up about 10 percent of the respondents.

Main Big City--any school within a city having a population of at least 200,000 and not considered low or high metro in nature.

Urban Fringe--any school outside the city limits of a big city, but within the urbanized area of such a city or cities and not considered low or high metro in nature.

Medium City--any school in a city having a population of at least 25,000 and less than 200,000 and not in the urbanized area of a big city and not considered low or high metro in nature.

Small Place--any school in the open country or in a community having a population less than 25,000 and not in the urbanized area of a big city.

III. SETTING THE STANDARD

While society might wish that all 17-year-olds attending school could perform each of the very basic reading tasks in the mini-assessment, NAEP and Right to Read staff members felt that might not be a realistic standard.

A more realistic level of achievement, they decided, might be found by asking a group of 17-year-old "superior readers" to do the tasks and finding out what percentage could do so correctly.

A superior reader was defined as a 17-year-old student who had attained at least the 95th percentile on the College Entrance Examination Board reading test or an equivalent standardized reading test. One hundred such young people were located in a metropolitan area and completed the exercises.

The percentage of superior readers who responded correctly on each exercise was considered to be the "highest expected level of performance" (HELP) for that exercise.

The percentage of all the 17-year-olds in the national sample who responded correctly on each exercise was adjusted by converting the figure to a percentage of the highest expected level of performance for that exercise, rather than measuring it against the ideal of 100 percent.

(For example, if 70% of the national sample answered an exercise correctly but only 90% of the superior readers were correct on that exercise, then the national level of performance would be adjusted upward to 78%.)

Because NAEP used 64 of the reading exercises in its 1971 general assessment of reading, and because 17-year-olds in school were one of the groups assessed, those exercises can be used to look generally at changes which have occurred in basic reading skills over the three years between the first reading assessment (1971) and the mini-assessment in 1974.

For those exercises, National Assessment reports changes in the average percentages of respondents answering correctly and "percentage of maximum possible gain" (PMPG) a group can achieve.

IV. THE RESULTS

Comparisons From 1971 to 1974

All groups gained in functional reading skills measured by the 64 exercises which were used both in the regular NAEP reading assessment in 1971 and in the Mini-Assessment of Functional Literacy in 1974.

The average percentage of a national sample of 17-year-old students who could perform the basic reading tasks was 2 percentage points higher in 1974 than in 1971.

In general, those groups gained most who had most to gain --those whose parents had no high school education gained 4.7 percentage points; blacks gained 3.6 percentage points, and those in the low metro communities gained 3.6 percentage points. Although not as low in 1971 as other groups, extreme rural communities also gained 4.1 percentage points.

But in order to give a more complete picture of the changes that occurred, NAEP suggests looking at the statistics from another angle, the hypothetical percentage of maximum possible gain any group can achieve -- or the difference between the group's initial achievement level and the superior reader levels of the mini-assessment.

From this standpoint, between 1971 and 1974, 17-year-olds living in extreme rural and high metro areas gained most (28% and 24%, respectively). Five other groups that showed maximum possible gain of more than 20% were those living in the Central region, those whose parents had no high school education, whites and those living in main big city and urban fringe communities.

The percentage of maximum possible gain is not intended to make any group look good or bad; it is simply a different way of looking at changes in functional reading skills. Any evaluation of such changes should take both the actual change and percentage of maximum possible change into consideration.

Results for 1974

Nearly all 17-year-old groups did moderately well on all questions in the mini-assessment. In only a few instances did less than 80 percent make a correct response, when percentages were adjusted to the superior reader achievement level. Even when the percentages are not so adjusted, they rarely drop below 70 percent. Or only three parts of exercises did everyone in the assessment, including superior readers, do badly.

All groups in the mini-assessment did best at reading tasks involving drawings and pictures and second best on those concerned with charts, maps and graphs. The poorest performance was shown on reference materials and reading exercises involving forms.

All groups understood word meanings best and drew inferences least well. Performance on other skills was mixed.

Whites did better than blacks on all reading exercises, with an average difference of 14.1 percentage points in favor of whites.

Among communities, the young people who did best in reading were from big-city schools in areas where a high percentage of parents of the students held professional, white-collar jobs.

Those students who did least well in all categories were from big-city schools where a high percentage of parents of the students were unemployed or on welfare. The average difference between the two groups was 10.7 percentage points.

The young people whose parents had some formal education past high school generally did best on all reading exercises, while those whose parents had no high school education did least well. The average difference between the two groups was 8.7 percentage points. Those who had at least one parent who graduated from high school ranked second, and those whose parents had some high school, but hadn't graduated, were third.

Young people in the Central region of the country did best on all kinds of reading, and those in the Southeast region did least well with an average difference of 5.2 percentage points between the two regions. Those in the Northeast region were second best on all categories except comprehension of main ideas and critical reading, in which they ranked third; those in the West were third on all categories except comprehension of main ideas and critical reading, in which they ranked second.

Girls did better than boys except in critical reading and reading from forms. The average difference between boys and girls over all exercises was 1.8 percentage points.

In only four groups and in five reading categories did the average drop below 80 percent achieving at the level expected. They were:

- Blacks, over all exercises (79.1%) and on passages (79.4), forms (75.7%),reference materials (72.1%),gleaning significant facts (79.7%) and drawing inferences (63.9%).
- Those whose parents had no high school education were below 80% on reference materials (79.4%) and drawing inferences (74.2%).
- Those whose parents had some high school were below 80% on drawing inferences (78.6%).
- Those in low metro areas were below 80% on reference materials (79.1%) and on drawing inferences (72.9%).

Who is functionally literate? How much of the basic reading materials of everyday life can a person misread and still function adequately?

These questions cannot be answered at this time,

But the mini-assessment has made it apparent that even those judged most literate by their answers to these exercises can't always perform at 100 percent level.

There were three exercise parts of the mini-assessment on which no group, including superior readers, performed well.

One exercise showed a replica of an automobile insurance policy statement. The difficult part asked the maximum amount the policy would pay if you injured another person in an automobile accident.

A second exercise showed an application blank with instructions for enrollment in a book club. The difficult part asked what money you should send with the order for the books--the instructions stated that the applicant would be billed.

A third exercise showed a replica of a traffic ticket. The difficult part asked for the last day on which the fine could be paid.

It is difficult to make a valid statement as to why these three exercises presented such problems even to the superior readers. The fact that they did gives us some food for thought about what functional literacy is and who is functionally literate. Insurance policy statements, traffic tickets and application forms (whether to book clubs or something else) are certainly part of everyday life and represent materials with which we must be able to cope. These exercises, it seems, point out that there are reading materials that we encounter in everyday life that stymie even some of the best readers, yet we would not say that these persons are functionally illiterate. Upon some reflection probably all of us could think of at least one occasion when we read some very basic, everyday-life reading material incorrectly.

What then is functional literacy?

V. SUMMARY FIGURES

Average Percentages of Each Group That Gave Correct Responses
(Adjusted to the Highest Expected Level of Performance)
Based on 64 Exercises From 1971 and 1974 Assessments

	Year 1971	Year 1974	Percentage Point Change	PMPG
NATIONAL	87.7	89.7	+ 2.0	16.4
REGION:				
Southeast	83.1	85.9	+ 2.7	16.2
West	87.0	88.6	+ 1.6	12.0
Central	90.2	92.3	+ 2.1	21.0
Northeast	89.1	90.5	+ 1.4	13.1
SEX:				
Male	86.3	88.8	+ 2.5	18.1
Female	89.1	90.6	+ 1.5	14.0
RACE:				
Black	72.2	75.8	+ 3.6	12.9
White	89.9	92.0	+ 2.1	20.8
PARENTAL EDUCATION:				
No High School	78.0	82.6	+ 4.7	21.1
Some High School	82.8	85.7	+ 2.9	17.1
Graduate High School	87.8	89.2	+ 1.3	11.0
Post High School	92.3	93.1	+ 0.8	9.1
SIZE AND TYPE OF COMMUNITY:				
Low Metro	79.4	83.0	+ 3.6	17.6
Extreme Rural	85.4	89.5	+ 4.1	28.2
Small Place	87.3	89.7	+ 2.4	18.8
Medium City	88.6	89.7	+ 1.1	9.7
Main Big City	88.0	90.6	+ 2.6	21.4
Urban Fringe	89.0	91.3	+ 2.3	20.7
High Metro	93.4	95.0	+ 1.6	24.4

Average Percentage of Each Group That Gave Correct Responses
(Adjusted to the Highest Expected Level of Performance)
Based on 86 Exercises From 1974 Assessment

	Percent
NATIONAL	91.2
REGION:	
Southeast	88.1
West	90.3
Central	93.3
Northeast	91.6
SEX:	
Male	90.2
Female	92.0
RACE:	
Black	76.1
White	93.2
PARENTAL EDUCATION:	
No High School	85.4
Some High School	88.0
Graduate High School	90.7
Post High School	94.0
SIZE AND TYPE OF COMMUNITY:	
Low Metro	87.2
Extreme Rural	91.2
Small Place	91.1
Medium City	91.2
Main Big City	91.9
Urban Fringe	92.4
High Metro	95.9

Percentages of Correct Responses for
Three Unique* Exercises

	Insurance Policy		Application		Traffic Ticket	
	Unadj.	Adj.	Unadj.	Adj.	Unadj.	Adj.
Superior Reader	36.7	100.0	53.5	100.0	60.0	100.0
National	17.5	47.7	43.7	81.7	46.6	77.7
Region:						
Southeast	10.9	29.7	42.6	79.6	42.1	70.2
West	14.4	39.2	41.3	77.2	46.4	77.3
Central	21.8	59.5	44.6	83.4	51.4	85.7
Northeast	19.1	52.0	45.4	84.9	44.8	74.7
Sex:						
Male	23.1	62.9	42.4	79.3	46.7	77.8
Female	11.8	32.2	47.8	89.5	46.5	77.5
Race:						
Black	10.0	27.2	36.6	68.4	27.5	45.8
White	19.1	52.0	44.7	83.6	51.2	85.3
Parental Education:						
No High School	13.3	36.2	42.4	79.3	30.0	50.0
Some High School	14.4	39.2	45.9	85.8	42.8	71.3
Graduate High School	16.8	45.8	42.8	80.0	46.1	76.8
Post High School	19.7	53.7	45.2	84.5	51.1	85.2
Size and Type of Community:						
Low Metro	13.0	35.4	46.1	86.2	36.1	60.2
Extreme Rural	14.6	39.8	44.2	82.6	51.1	85.2
Small Place	19.4	52.9	41.4	77.4	44.2	73.7
Medium City	12.8	34.9	38.2	71.4	48.9	81.5
Main Big City	27.6	75.2	46.9	87.7	50.5	84.2
Urban Fringe	15.0	40.9	48.1	89.9	45.7	76.2
High Metro	34.9	95.1	49.3	92.1	58.5	97.5

*These three exercises are cited because they are "unique" in that no group -- not even the superior readers -- did well on them.